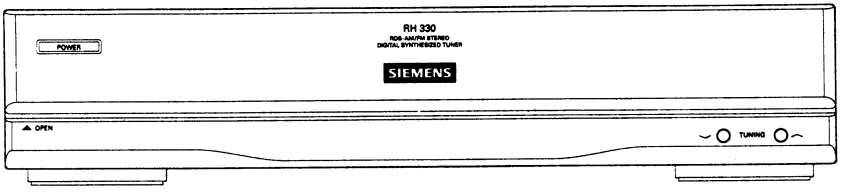
TUNER RH330T6



GENERAL TECHNICAL DATA

T U N E R

Power supply : 230V / 50Hz
Ranges : FM 87.5...108MHz
MW 522 ...1620KHz
LW 153 ...281KHz

Tuning steps : FM 50KHz
MW 9KHz
LW 1KHz

Intermediate frequencies : FM 10.7 +/- 0.1MHz
AM 450KHz

Sensitivity : FM <3uV(30dB, 40KHz)
MW <700uV/m (57dB)
LW <1000uV/m (60dB)

Selectivity : FM >60dB (+/-300KHz)
MW >25dB (+/-10KHz)

IF-Rejection : FM > 90dB (90MHz)
MW > 40dB (600KHz)
LW > 40dB (255KHz)

AM-Suppression : FM > 50dB

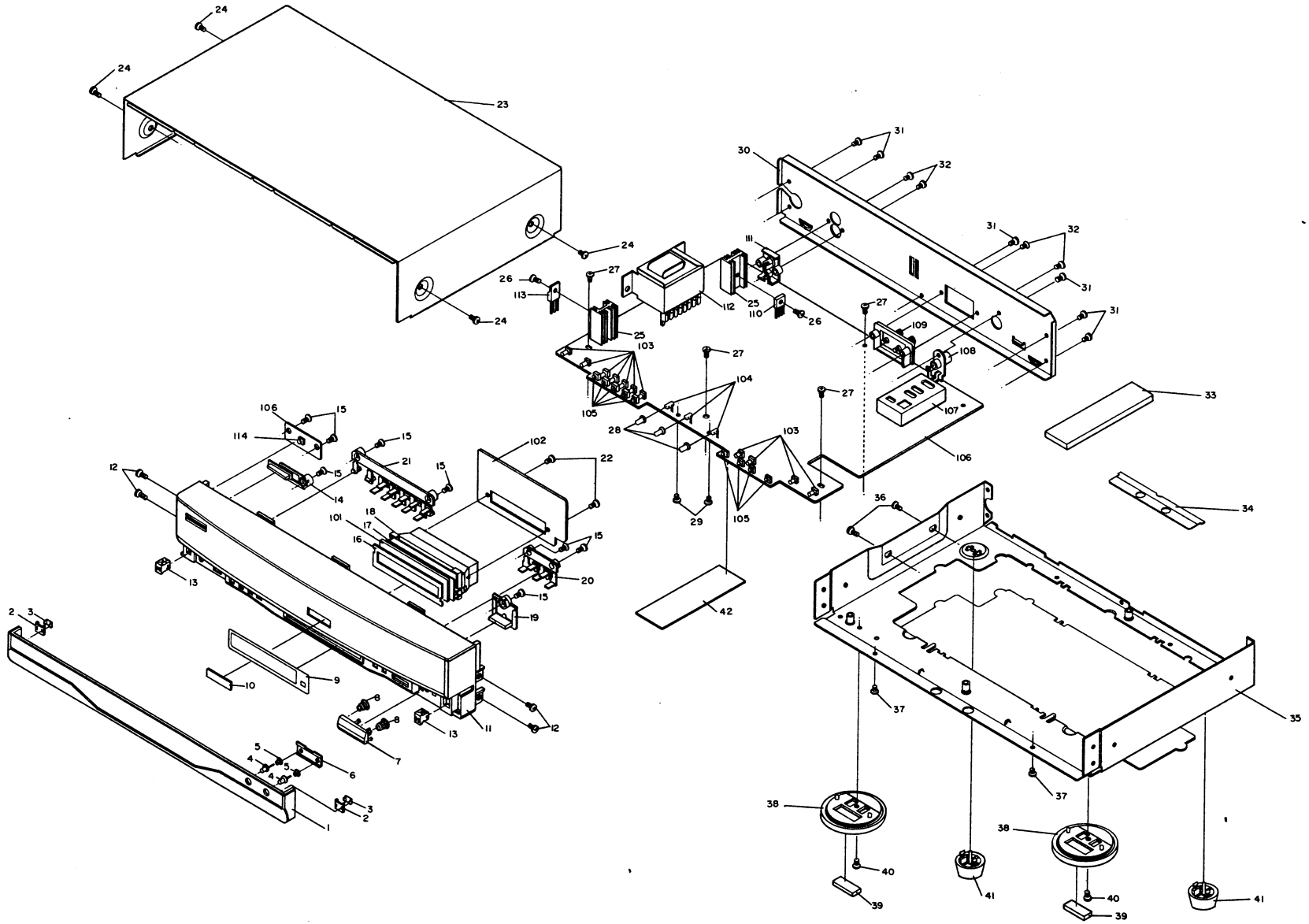
Image rejection : FM > 70dB (106MHz)
MW > 32dB (1404KHz)
LW > 25dB (255KHz)

Signal-to-noise ratio : FM > 63dB
MW > 40dB

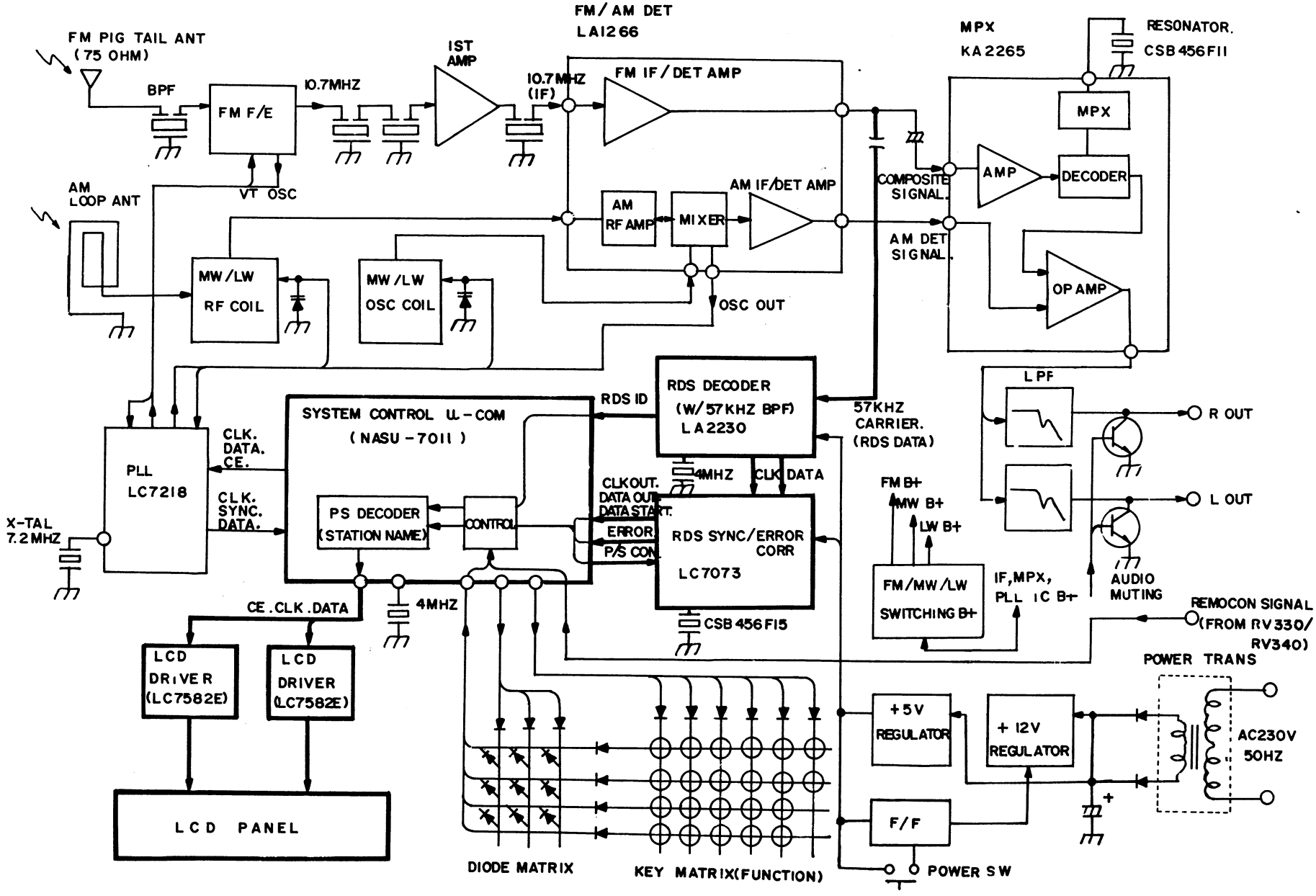
Distortion : FM < 0.3%
MW < 1%

Frequency : FM< 30Hz...>14KHz

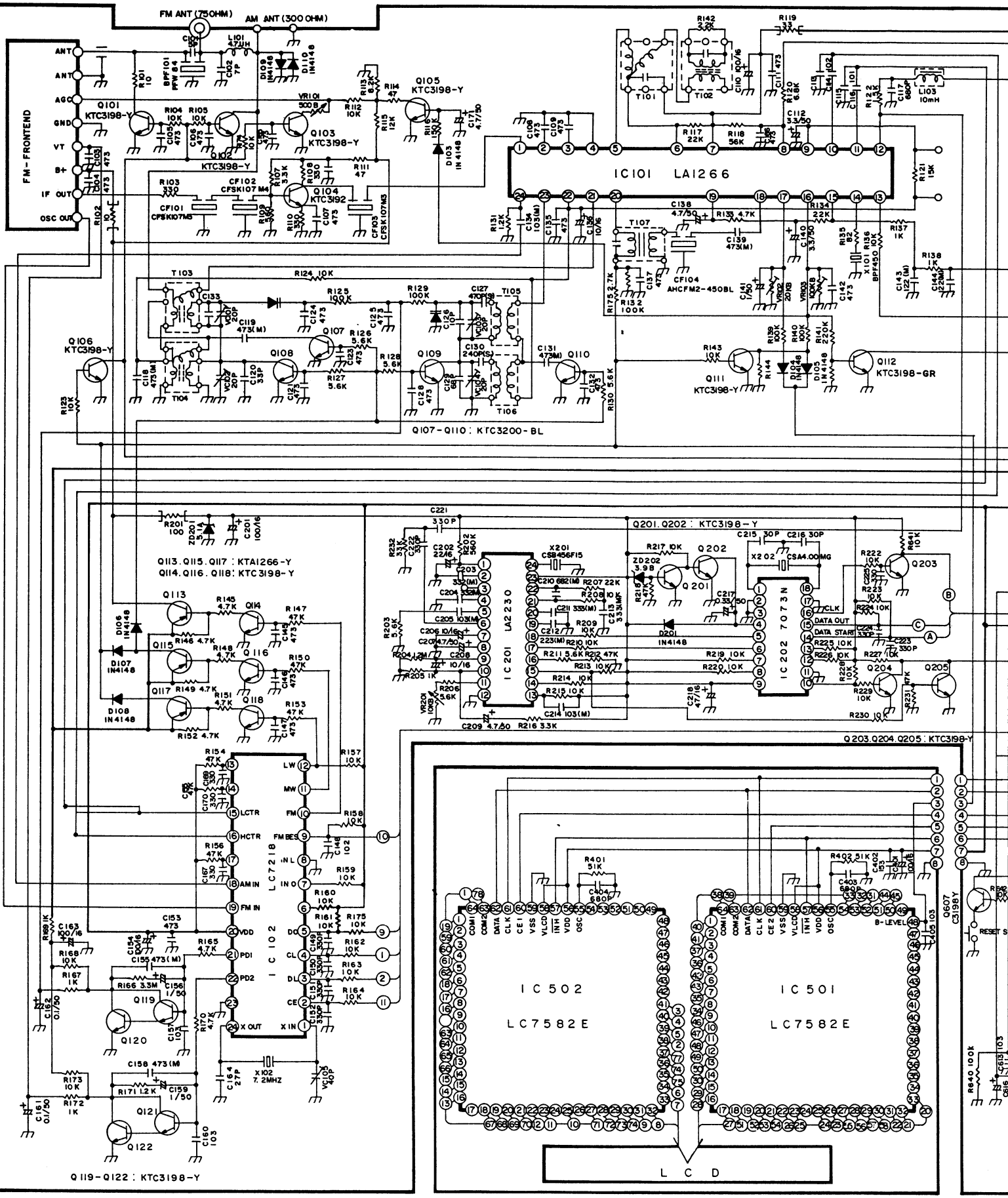
EXPLODED VIEW (RH330T6)

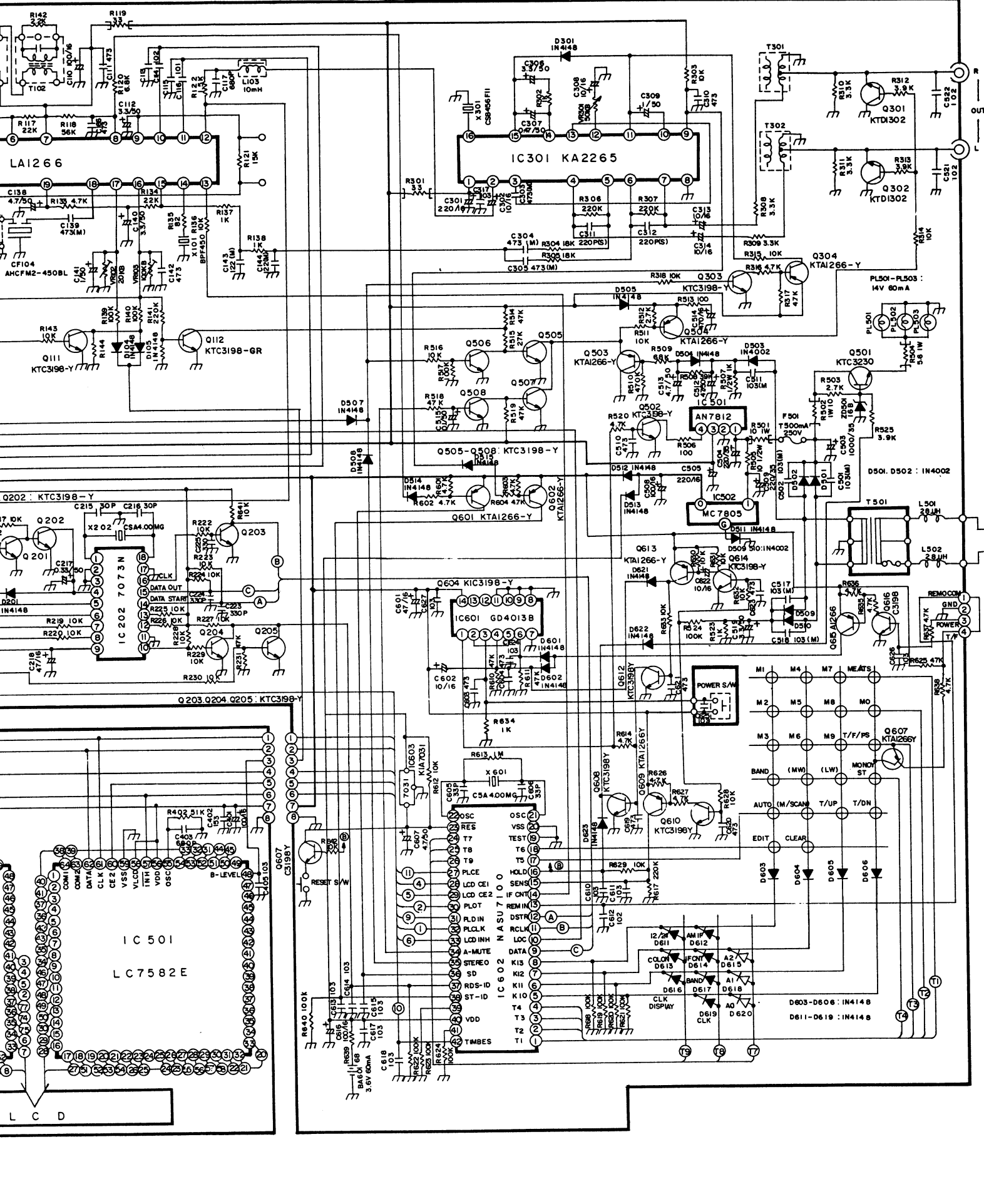


BLOCK DIAGRAM (RH330T6)

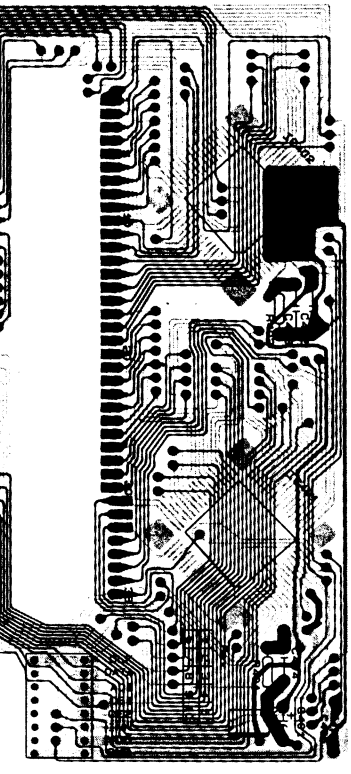


SCHEMATIC DIAGRAM (RH330T6)

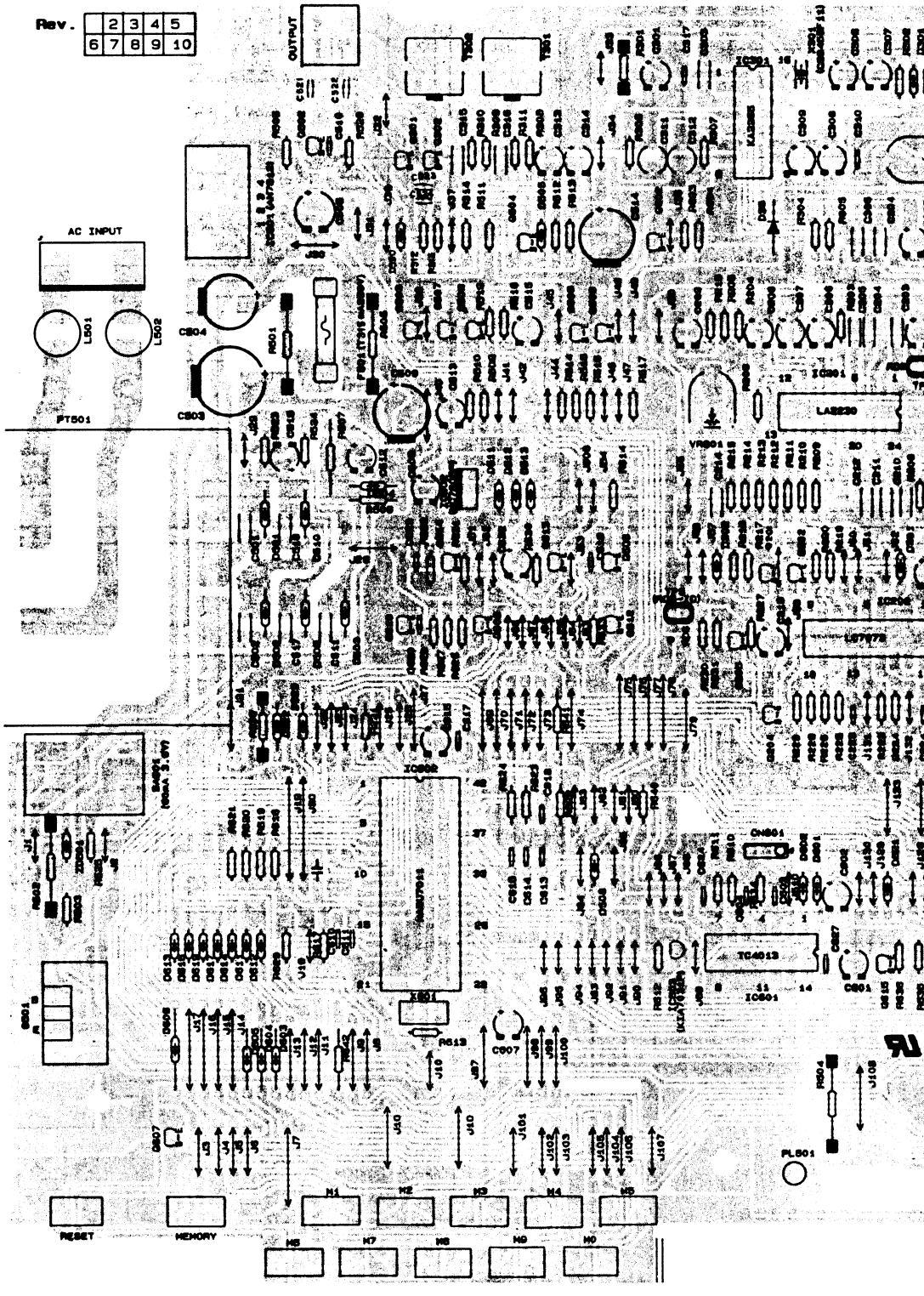


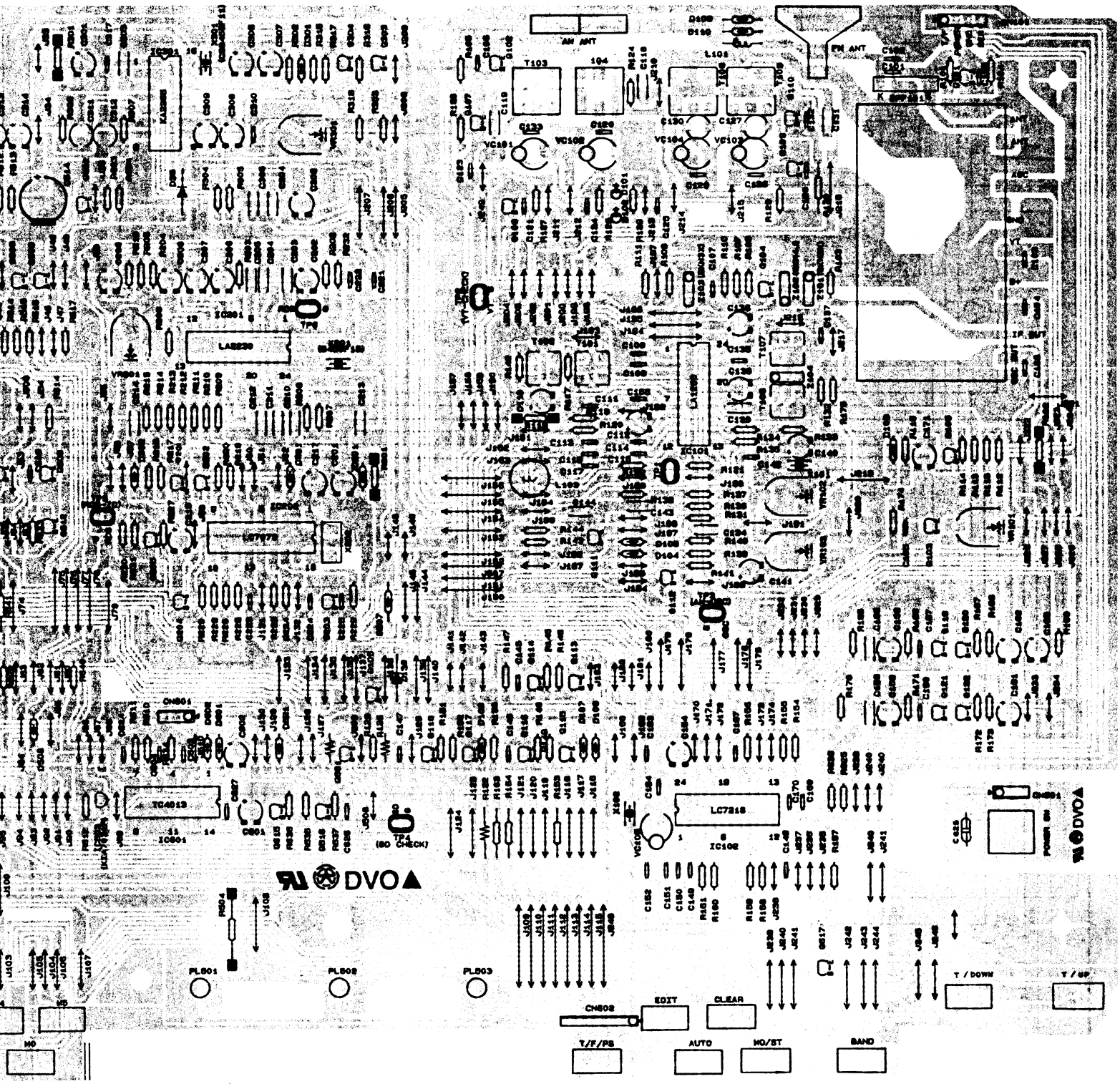

LA1266
IC301 KA2265
IC 202 7073N
IC 501
LC7582E
IC602 NASU7100
IC601 GD4013B
IC502
MC7805
AN7812
Q505-Q508: KTC3198-Y
Q202 : KTC3198-Y
Q203.Q204.Q205 : KTC3198-Y
Q604 KIC3198-Y
Q601 KTA1266-Y
PL501-PL503 : 14V 60mA
D501. D502 : IN4002
D603-D606 : IN4148
D611-D619 : IN4148
POWER S/W
RESET S/W
REMOCON
L C D

C.B. LAYOUT (RH330T6)

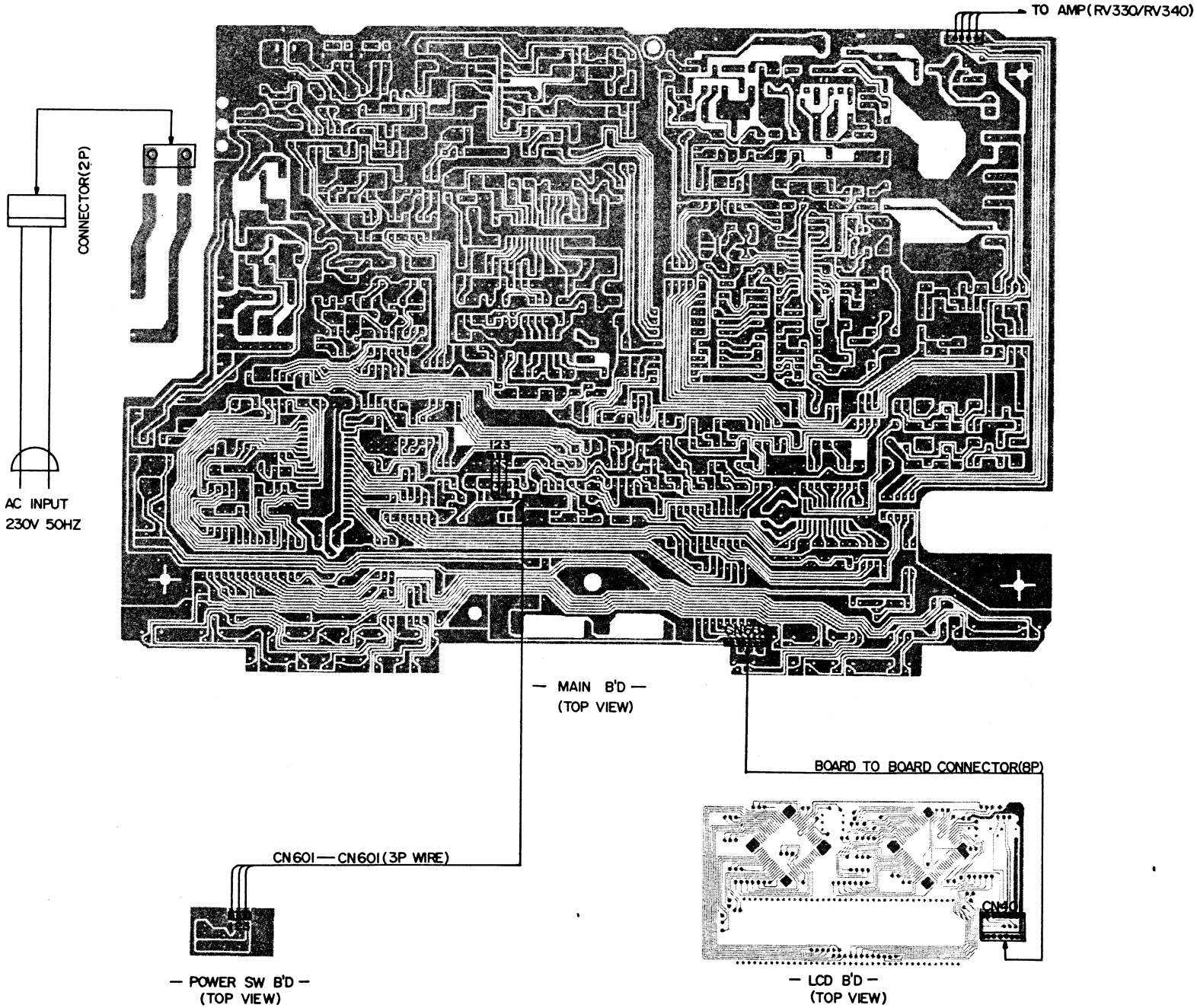


MAIN P.C.BOARD (RH330TG)

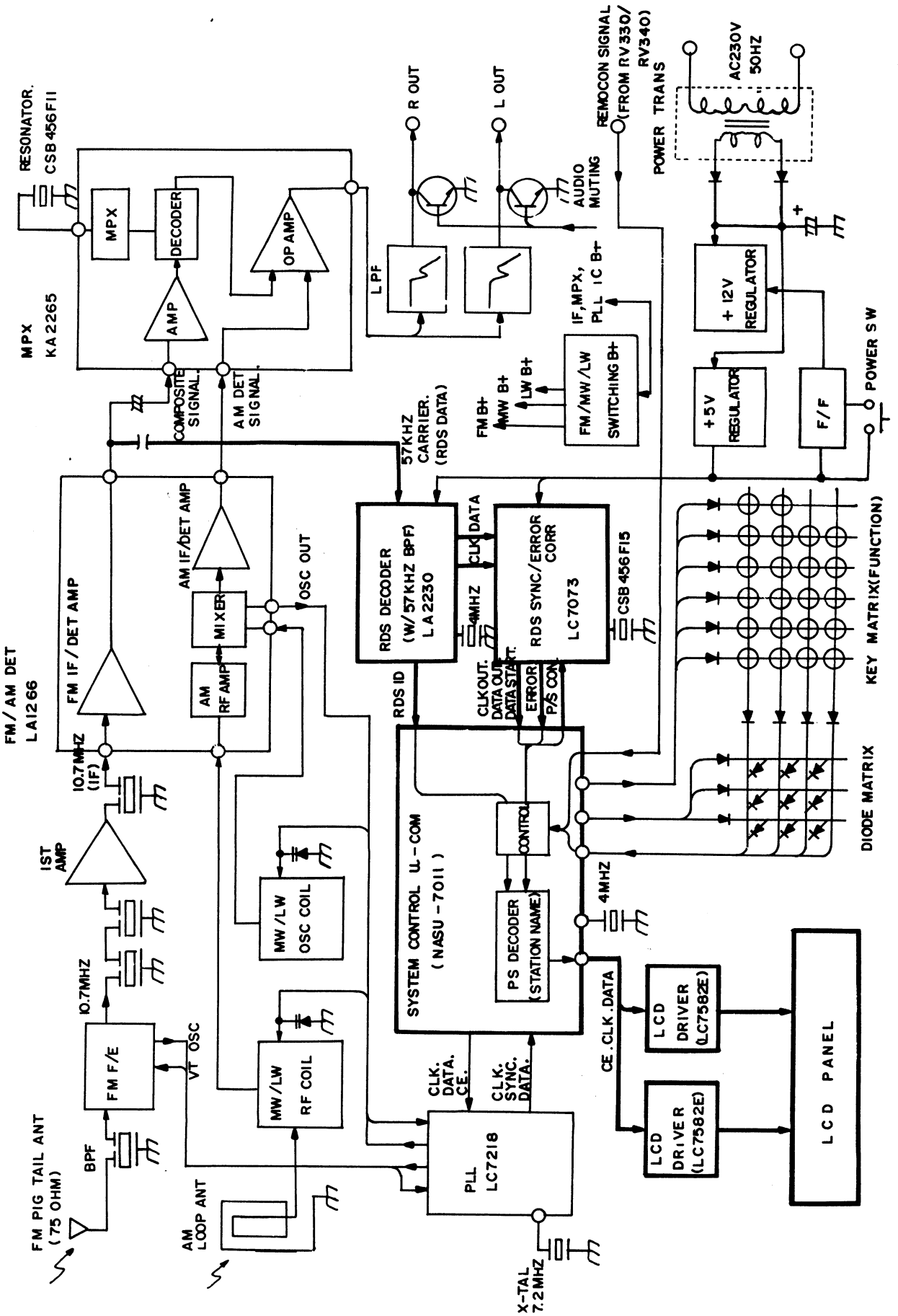



AM ANT
FM ANT
IF OUT
LA1230
LC7218
LC7575
TC40H13
TP4
(SD CHECK)
DVO
CN802
EDIT
CLEAR
T/F/PS
AUTO
MO/ST
BAND
T / DOWN
T / UP
MO

WIRING DIAGRAM (RH330T6)



BLOCK DIAGRAM (RH330T6)



IC301 (KA2265)

MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
ALL	11.5	3.2	3.2	2.5	3.1	3.1	2.5	0	0.6	2.9	2.9	3.2	2.9	2.9	2.9	3.2

IC401.402 (LC7582E)

MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
ALL	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.9	5	4.3	5	0	0
	61	62	63	64																
	0	0	2.5	2.5																

IC501 (AN7812)

MODE	1	2	3	4
ALL	21.5	0	12	13.3

IC502 (MC7805C)

MODE	1	2	3
ALL	21.3	0	5

IC601 (GD4013B)

MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
ALL	0	5	12	13.3	5	0	0	0	0	0	0	0	5	5

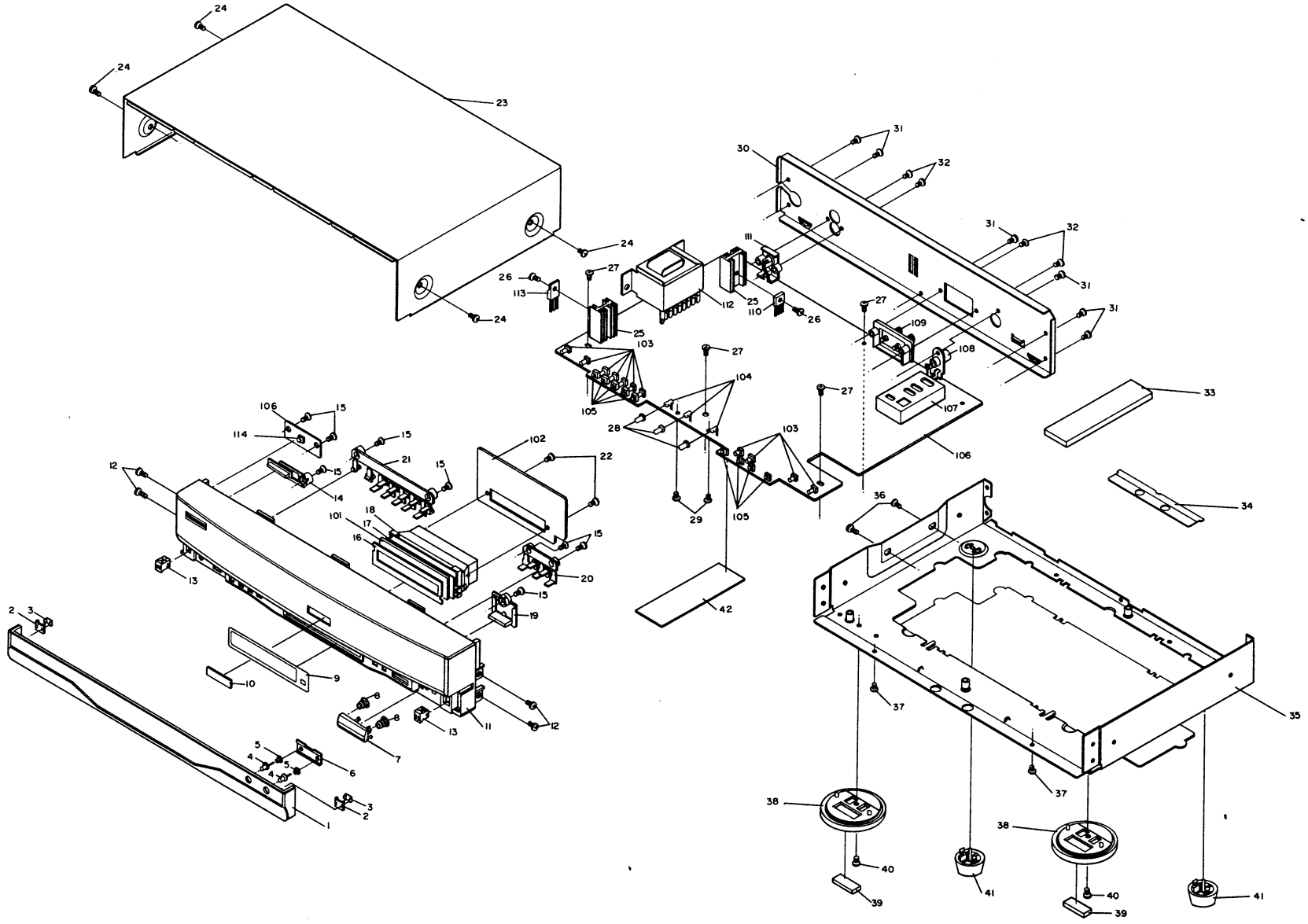
IC602 (NASU7011)

MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	4.3	4.3	4.3	4.3	0	0	0	0	4.9	0	4.9	4.9	5	0	0	5.4	4.3	4.3	0	0
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
ALL	2	2	4.3	0	0	0	0	0	0	0	4.3	0	4.3	2.8	0	4.4	0	4.4	0	4.3
	41	42																		
	0	0.8																		

IC603 (KIA7031P)

MODE	1	2	3
ALL	5	0	5

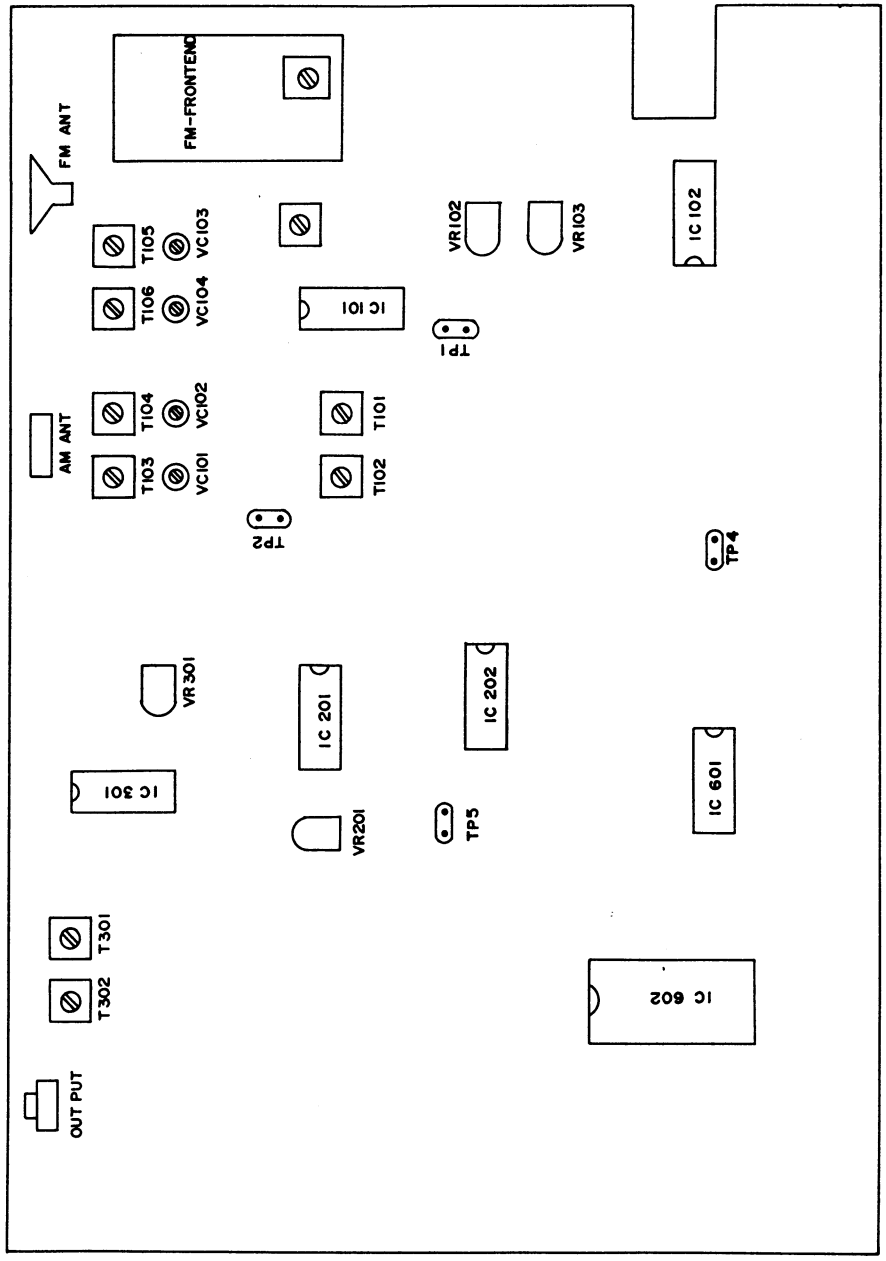
EXPLODED VIEW (RH330T6)



TUNER ALIGNMENT RH330T6

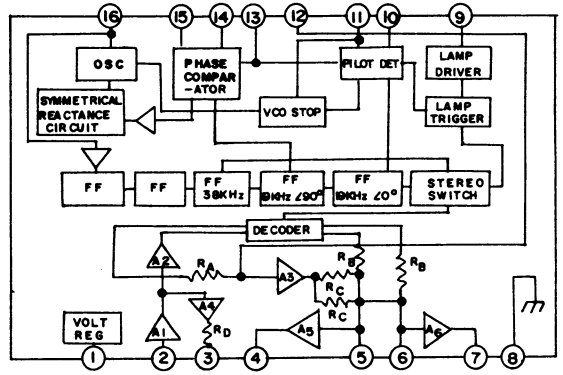
Step	Function	Preparation	Singal input	Adjusting element	Indicated value
1.	UKW -Discriminator	Connect RF-generator(75ohm) to antenna socket. Connect voltmeter(10M) to TP1 connect distortion-meter across speakers. Set RH330T6-display to 98MHz.	98MHz/40KHz 1KHz/1uV	T101 T102	<20mV <0.5%(K3)
2.	FM-Muting level	Set RH330T6-display to 98MHz. Switch mono switch to off.	98MHz/40KHz /1KHz/7.1uV	VR103	Muting off
3.	FM-RDS Sens	Connect RDS-generator to antenna socket. Connect voltmeter to TP5. Set RH330T6-display to 98MHz.	98MHz/40KHz 1KHz/20uV	VR201	Max. High-Level (5V)
4.	AM-ZF (MW)	Connect RF-generator to antenna socket. Set RH330T6-display to 531KHz.	450KHz/30% /400Hz	T107	Max. 400Hz-Level
5.	MW-Corner-frequencies	Set RH330T6-display to 531KHz. Set digitalvoltmeter(10M) to TP2.		T105	0.9V
6.	MW-Corner-frequencies	Set RH330T6-display to 1620KHz. Set digitalvoltmeter(10M) to TP2.		VC103	8.0V
7.	Repeat step 4 and 5 again				
8.	MW-Tracking repeat adjustment several times	Set RH330T6-display to 603KHz. Set RH330T6-display to 1404KHz	603KHz/30% /400Hz 1404KHz/30% /400Hz	T103 VC101	Max. 400Hz-Level Max. 400Hz-Level
9.	LW-Corner-frequencies	Set RH330T6-display to 153KHz. Set digitalvoltmeter(10M) to TP2.		T106	0.8V
10.	LW-Corner-frequencies	Set RH330T6-display to 281KHz. Set digitalvoltmeter(10M) to TP2.		VC104	5.7V
11.	Repeat step 8 and 9 again.				
12.	LW-Tracking Repeat adjustment several times	Set RH330T6-display to 153KHz. Set RH330T6-display to 281KHz.	153KHz/30% /400Hz 281KHz/30% /400Hz	T104 VC102	Max. 400Hz-Level Max. 400Hz-Level

LOCATION / ALIGNMENT POINTS

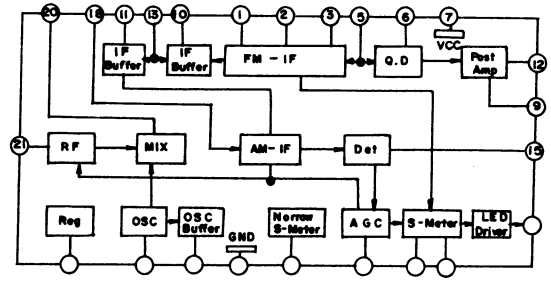


IC BLOCK DIAGRAM (RH330T6)

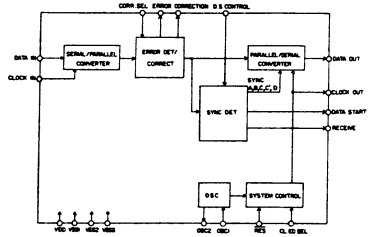
KA2265



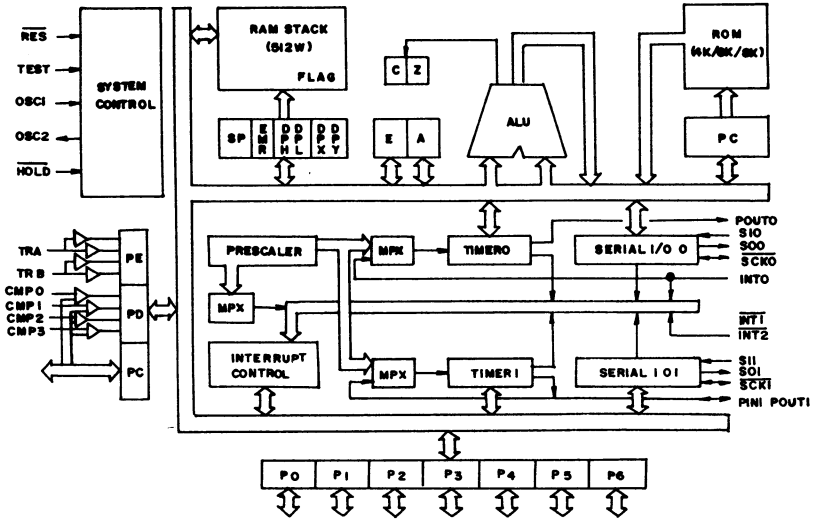
LA1266



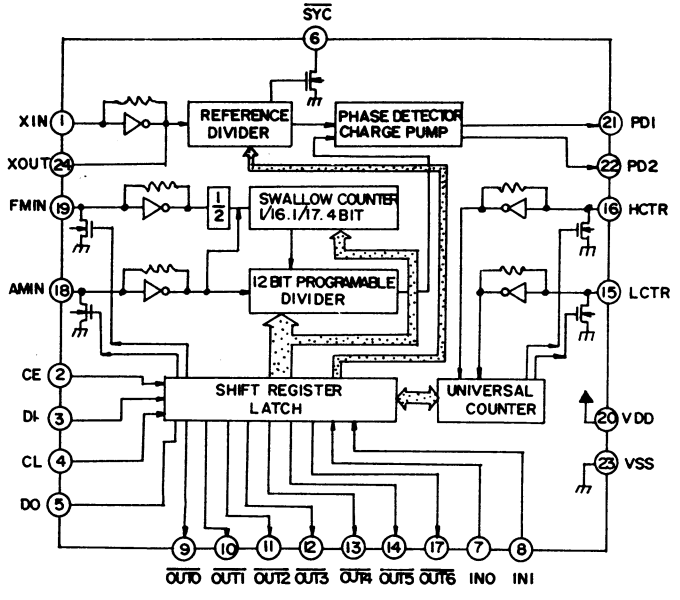
LC7073



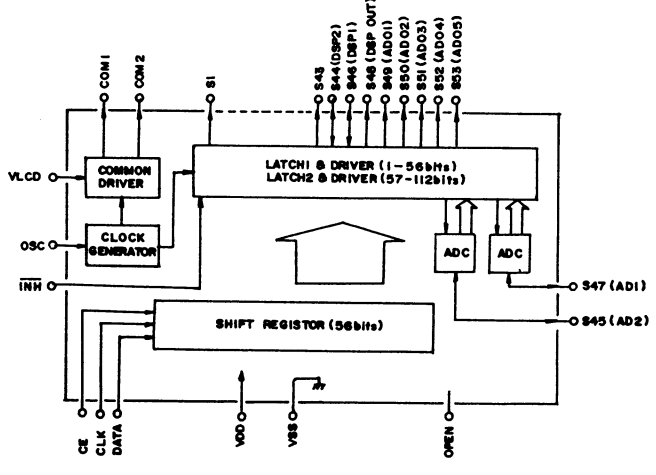
LC66308A



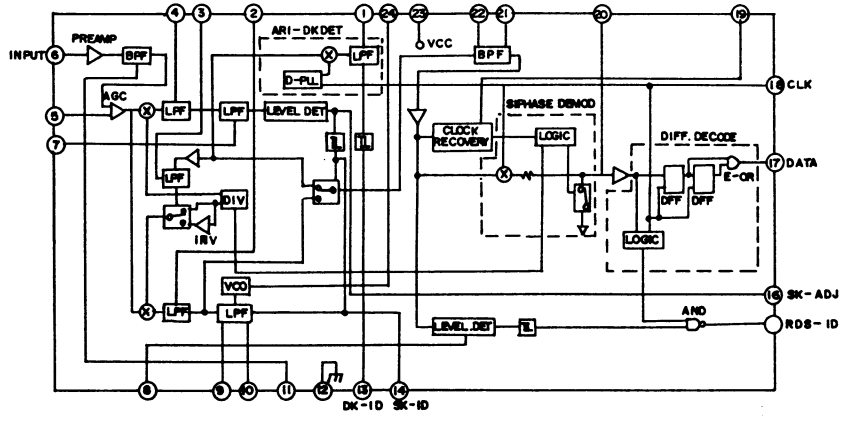
LC7218



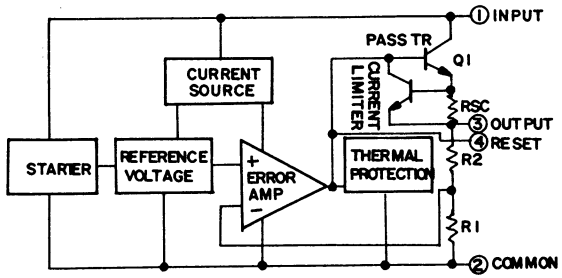
LC7582E



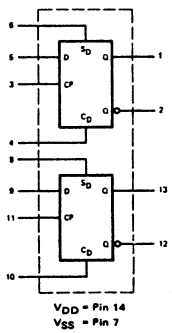
LA2230



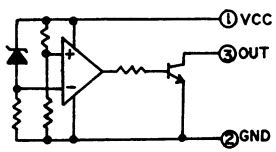
AN7812R



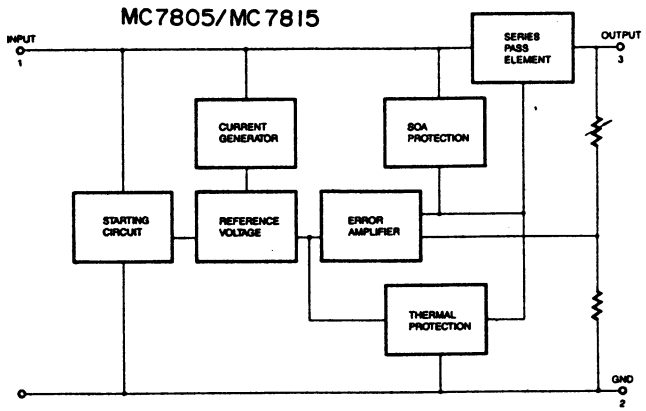
TC4013PB/ NJU4013B



KIA7031P



MC7805/MC7815



IC VOLTAGE CHECK LIST (RH-330T6)

IC101 (LA1266)

MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FM	2.5	2.5	2.5	0	11.1	11.1	11.1	0	3.8	2.4	2.8	3.2	0	1.4	1.5	1.4	0	2.5	1.5	0
MW/LW	1.1	1.1	1.1	0	11.3	11.3	11.3	0	3.8	2.4	2.2	3.1	0	1.4	1.8	2.4	3.1	1.1	1.9	10
MODE	21	22	23	24																
FM	4	4	4	2.6																
MW/LW	3.6	3.6	3.6	2.1																

IC102 (LC7218)

MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FM	2.2	0	0	0	4.3	0	5	0	1	5	0	0	0	0	0	0	0	0	2.5	5
MW	2.2	0	0	0	4.3	0	5	0	1	0	5	0	0	0	0	0	0	2.5	0	5
LW	2.2	0	0	0	4.3	0	5	0	1	0	0	5	0	0	0	0	0	2.5	0	5
MODE	21	22	23	24																
FM	1.1	1.1	0	2.6																
MW	1.1	1.1	0	2.6																
LW	1.1	1.1	0	2.6																

IC201 (LA2230)

MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FM	1.5	1.4	0.5	1.4	2.3	2.4	2.8	0.7	1.4	0	0.7	0	5	5	2.7	0	2.5	2.4	2.4	1
MODE	21	22	23	24																
FM	2.1	2.1	5	3.3																

IC202 (LC7073)

MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
FM	2	0	0	4.8	2.4	2.5	5	5	5	5	0	5	5	5	5	0	0	2.2